# **BIOTIC COMMUNITIES**

## **Fish Community Data**

Fish community information has been collected from several stream locations in the Blue River basin (Figure fs). Fishes sampled by MDC from 1966-1998 are listed in Table 5. Fishes sampled by Kansas Wildlife and Parks in 1978 are listed in Table 6.

According to Pflieger (1975), 67 species (including big river species) of fish have distributions that include the Blue River basin. Thirty-eight species have been sampled within the basin. Severe water pollution and fish habitat destruction have reduced the use of the lower Blue River by Missouri River fishes. Sampling trips during 1978 and 1980 using boat electrofishing equipment yielded few fish in this reach of the river.

The Blue River supports quality size channel catfish and carp. It also supports populations of largemouth bass, bluegill and green sunfish, with good numbers of intermediate sized fish. The latter three species are probably more important for catch-and-release fishing especially for anglers who wade fish. If fishing pressure increases substantially, restrictive harvest regulations would probably be needed to provide sustained quality angling.

## **Threatened and Endangered Species**

Pallid sturgeon (Scaphirhychus albus), lake sturgeon (Acipenser fulvescens), and flathead chub (Hybopsis gracilis) are endangered species in Missouri (MDC 1991). Although they are found predominately in the Missouri and Mississippi rivers, they can also migrate into lower reaches of tributary streams. Due to the poor water quality conditions in the lower reach of the Blue River, it is doubtful these species would be found above the mouth.

The bald eagle (Haliaeetus leucocephalus) and the peregrine falcon (Falco peregrinus) are federally endangered species found within the Blue River basin (MDC 1991).

# **Fish Stocking**

KDWP stocked 24 adult spotted bass (Micropterus punctulatus) in two reaches of Indian Creek in 1985 (USFWS 1986; John Reinke - KDWP, personal communication). To date, the results of these stockings have not been evaluated.

No other known fish stockings by public agencies have taken place in basin streams. Due to its proximity to an urban area, illegal stocking of exotic fish by local aquarium owners probably occurs throughout the basin. Basin streams also receive fish in overflow waters from impoundments.

#### **Fishing**

No angler creel information is available for the Blue River or any of its tributaries. Fishing pressure is probably moderate. Most anglers probably fish for catfish and carp using live and prepared baits. Although most fishing occurs upstream from 63rd Street, all reaches of the river are fished. Health advisories related to chlordane contaminated fish have probably reduced angling and harvest of fish in recent years.

#### **Commercial Harvest**

No commercial harvest of fish takes place within the Blue River basin.

# **Other Management Efforts**

Currently investigations are underway to find areas where the stream corridor can be improved upstream from 63rd Street. A good stream corridor and retention basins in the watershed will be the most effective methods of protecting the biological integrity of the Blue River.

### **Present Regulations on Streams Within the Basin**

The Blue River and its tributaries fall under statewide fishing regulations of Missouri and Kansas. No special management units exist at this time. If fishing increases substantially, restrictive harvest regulations may be needed to protect some sport fish populations.

Table 5. Fishes sampled from the Blue River by MDC, 1966-1998.

Species	1966	1978-1980	1986-1998
Shortnose gar ( <i>Lepisosteus platostomus</i> )		X	
Gizzard shad ( <i>Dorosoma cepedianum</i> )		X	X
Common carp ( <u>Cyprinus carpio</u> )	X	X	X
River carpsucker ( <u>Carpiodes carpio</u> )	X	X	X
Quillback ( <i>Carpiodes cyprinus</i> )			X
White sucker ( <i>Catostomus commersoni</i> )	X	X	X
Freshwater drum ( <u>Aplodinotus grunniens</u> )			X
Bigmouth buffalo ( <u>Ictiobus cyprinellus</u> )			X
Smallmouth buffalo ( <u>Ictiobus bubalus</u> )			X
Largemouth bass ( <u>Micropterus salmoides</u> )	X	X	X
White crappie ( <i>Pomoxis annularis</i> )	X	Х	X

Black crappie ( <i>Pomoxis nigromaculatus</i> )			X
Bluegill ( <i>Lepomis macrochirus</i> )	x	X	X
Longear sunfish ( <i>Lepomis megalotis</i> )			X
Green sunfish ( <i>Lepomis cyanellus</i> )	x	X	X
Orangespotted sunfish ( <i>Lepomis humilis</i> )	X	X	X
Hybrid sunfish (varies x varies)			X
Channel catfish ( <i>Ictalurus punctatus</i> )	X	X	X
Flathead catfish (Pylodictis olivaris)		X	X
Black bullhead ( <u>Ameiurus melas</u> )		X	X
Yellow bullhead ( <u>Ameiurus natalis</u> )		X	X
Grass carp ( <u>Ctenopharyngodon idella</u> )			X
Bighead carp ( <u>Hypopthalmicthys nobilis</u> )			X
Goldfish ( <i>Carassium auratus</i> )		X	X
Central stoneroller ( <u>Campostoma anomalum</u> )	X	X	X
Creek chub (Semotilus atromaculatus)	X	X	
Red shiner ( <u>Cyprinella lutrensis</u> )	X	X	X
Redfin shiner ( <u>Lythrurus umbratilis</u> )	X	X	X
Golden shiner ( <i>Notemigonus crysoleucas</i> )	x	X	X
Emerald shiner ( <i>Notropis atherinoides</i> )		X	X
Sand shiner (Notropis stramineus)	x	X	X
Suckermouth minnow ( <i>Phenacobius mirabilis</i> )	x	X	X
Bluntnose minnow ( <u>Pimephales notatus</u> )	X	X	X
Fathead minnow ( <u>Pimephales promelas</u> )	X		
Slender madtom ( <u>Noturus exilis</u> )	X	X	X
Johnny darter (Etheostoma nigrum)		X	X
Orangethroat darter ( <i>Etheostoma spectabile</i> )	х		X
Logperch (Percina caprodes)	X		X

Table 6. Fishes sampled from Blue River basin streams by Kansas Department of Wildlife and Parks (KDWP), 1978.

Species	Blue River	Wolf Creek	Coffee Creek	Indian Creek	Tomahawk Creek
Central stoneroller ( <u>Campostoma</u> <u>anomalum</u> )	X		X		Х
Red shiner ( <u>Cyprinella lutrensis</u> )	X	X	X		X
Redfin shiner ( <u>Lythrurus umbratilis</u> )	X	X			
Golden shiner ( <u>Notemigonus crysoleucas</u> )	X	X	X		X
Sand shiner (Notropis stramineus)	X				
Bluntnose minnow ( <u>Pimephales notatus</u> )	X	X	X		
Fathead minnow ( <i>Pimephales promelas</i> )			X		X
Creek chub (Semotilus atromaculatus)	X		X		Х
White sucker ( <i>Catostomus commersoni</i> )		X			
Black bullhead ( <u>Ameiurus melas</u> )	X	X	X		X
Yellow bullhead ( <u>Ameiurus natalis</u> )			X		
Channel catfish ( <i>Ictalurus punctatus</i> )	X		X		X
Slender madtom ( <u>Noturus exilis</u> )	X	X	X		X
Green sunfish ( <u>Lepomis cyanellus</u> )	X	X	X	X	X
Orangespotted sunfish ( <i>Lepomis humilis</i> )		X			X
Bluegill ( <i>Lepomis macrochirus</i> )		X	X		X
Largemouth bass ( <u>Micropterus salmoides</u> )	X	X	X		х
Orangethroat darter ( <u>Etheostoma spectabile</u> )	X		X		
Logperch (Percina caprodes)	Х	X			

